

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 February 2004 (19.02.2004)

PCT

(10) International Publication Number
WO 2004/015488 A1

(51) International Patent Classification⁷: G02F 1/1335

Sanghyun-ri, Suji-eup, 449-843 Yongin-city, Kyungki-do (KR).

(21) International Application Number:
PCT/KR2002/001784

(74) Agent: YOU ME PATENT & LAW FIRM; Teheran Bldg., 825-33, Yoksam-dong, Kangnam-ku, 135-080 Seoul (KR).

(22) International Filing Date:
19 September 2002 (19.09.2002)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
2002-0047139 9 August 2002 (09.08.2002) KR

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (*for all designated States except US*): SAM-SUNG ELECTRONICS CO. LTD. [KR/KR]; 416, Mae-tan-dong, Paldal-ku, 442-370 Suwon-city, Kyungki-do (KR).

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

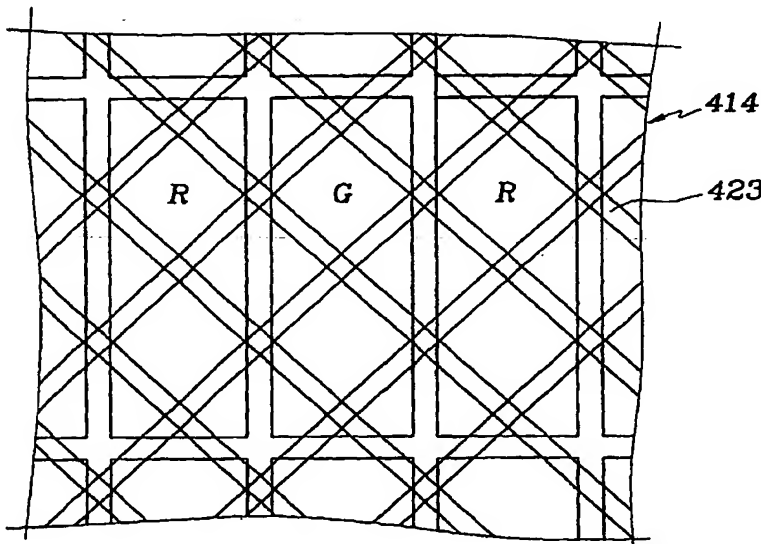
(75) Inventors/Applicants (*for US only*): SONG, Young-Goo [KR/KR]; Samsung Apt. 921-1201, Byeokjeok-gol, Youngtong-dong, Paldal-ku, 442-726 Suwon-city, Kyungki-do (KR). HONG, Kweon-Sam [KR/KR]; Samsung Apt. 2-206, 4759, Shingil-dong, Youngdeungpo-ku, 150-050 Seoul (KR). LEE, Han-Ju [KR/KR]; 294, Dacheung-dong, Mapo-ku, 121-809 Seoul (KR). UM, Yoon-Sung [KR/KR]; Ssangyong Apt. 216-1702,

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: POLARIZER, PANEL FOR A LIQUID CRYSTAL DISPLAY, AND LIQUID CRYSTAL DISPLAY, INCLUDING A SCATTERING LAYER



(57) Abstract: Red, green, blue color filters are arranged in sequence in pixel areas of an LCD according to the present invention. Filters, which are scattering particles of a scattering layer, are distributed in a net, and they are distributed in a diagonal direction such that the concentration of the fillers is lower in border areas located between the pixel areas than in the pixel areas.

WO 2004/015488 A1